

# PATENT ABSTRACTS OF JAPAN

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(71)Applicant : KYOCERA CORP

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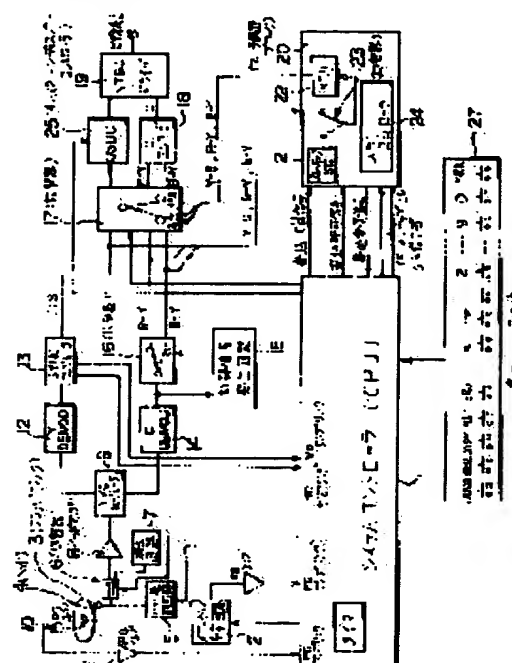
(72)Inventor : WAKABAYASHI TAICHI

## (54) STILL VIDEO PICTURE ERASURE SYSTEM UTILIZING MULTI-SCREEN

### (57)Abstract:

**PURPOSE:** To select plural tracks desired to be erased at once while confirming their pictures on a multi-screen and to erase all selected pictures in one-touch after the pictures are selected.

**CONSTITUTION:** When a multi-key (MLT) of a key unit 27 is operated for multi-screen display, a system controller 1 seeks a floppy disk to write a picture of each track to a memory 22 thereby displaying a multi-screen on a monitor. When a cursor or a ten-key is used to enter a track number desired to be erased, a mark present to a picture on the multi-screen corresponding to the track is superimposed on the displayed picture by an on-screen display controller 25. Plural pictures are similarly selected and when all pictures to be erased are selected and an erase key (ERS) is operated, a head 4 is sequentially moved to the selected track position and the picture thereat is erased by an erasure circuit 7.



## LEGAL STATUS

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**CLAIMS**

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[Claim(s)]

[Claim 1] Multi-screen selection actuation starts automatically by floppy disk wearing. In the playback machine of the electronic "still" camera system which displays a multi-screen by reproducing the image of each truck of a floppy disk and writing in the memory for multi-screens by control of a memory controller The elimination circuit which eliminates the video signal currently recorded on said floppy disk, The display-output section for outputting the display which distinguishes visually the image which should eliminate said multi-screen, and other images on a multi-screen, When the image which should be eliminated on a multi-screen with the selection means and said selection means for choosing the image which should be eliminated is chosen, The control means controlled to eliminate the image chosen by said elimination circuit from a floppy disk after displaying that it is distinguished from other images by said image which should be eliminated and choosing said image which should be eliminated one or more by said display-output section, The still video image elimination method using the multi-screen characterized by preparation \*\*\*\*\*,

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**DETAILED DESCRIPTION**

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**[Detailed Description of the Invention]****[0001]**

**[Industrial Application]** If it says in more detail, when eliminating the image elimination method in an electronic "still" camera system with the display capabilities of multi-screens, such as 25 split screens, and the contents currently written in the floppy disk, in case this invention chooses a truck to eliminate using multi-picture features, it relates by displaying the image of the selected truck in distinction from other images to the still-video image elimination method it enabled it to eliminate, checking the contents of an image moreover continuously.

**[0002]**

**[Description of the Prior Art]** The elimination actuation in the conventional electronic "still" camera system is started from one when the playback machine has stopped of conditions, while reproducing the image. What eliminates during playback of an image cannot choose two or more trucks of an image to eliminate at random. Moreover, although it is possible for what performs elimination to choose two or more trucks of an image to eliminate at once at random from halt, selection while checking an image cannot be performed.

**[0003]**

**[Problem(s) to be Solved by the Invention]** In addition, the image check was performed using the multi-screen as one of the approaches of eliminating the image of an electronic "still" camera system, and this artificer has already proposed the multi-screen elimination method which eliminates to coincidence the image of a floppy disk, and the image with which a multi-screen corresponds (Japanese Patent Application No. 5-87948). It is in offering the still video image elimination method which can eliminate all selection images by one-touch, after this invention's having developed the above-mentioned multi-screen elimination method more, and the purpose's performing the display which shows distinction with the image which chose two or more trucks to eliminate at once, checking the image, and did not choose them and choosing an image.

**[0004]**

**[Means for Solving the Problem]** In order to attain said purpose, the still video image elimination method by this invention Multi-screen selection actuation starts automatically by floppy disk wearing. In the playback machine of the electronic "still" camera system which displays a multi-screen by reproducing the image of each truck of a floppy disk and writing in the memory for multi-screens by control of a memory controller The elimination circuit which eliminates the video signal currently recorded on said floppy disk, The display-output section for outputting the display which distinguishes visually the image which should eliminate said multi-screen, and other images on a multi-screen, When the image which should be eliminated on a multi-screen with the selection means and said selection means for choosing the image which should be eliminated is chosen, After displaying that it is distinguished from other images by said image which should be eliminated and choosing said image which should be eliminated one or more by said display-output section, it has the control means controlled to eliminate the image chosen by said elimination circuit from a floppy disk, and is constituted.

**[0005]**

**[Function]** According to the above-mentioned configuration, selection becomes possible collectively, checking the contents of the truck of an image to eliminate. Moreover, it becomes eliminable by one-

touch control about two or more images chosen at random.

[0006]

[Example] Hereafter, with reference to a drawing, this invention is explained in more detail. Drawing 1 is the circuit block diagram showing the example of the playback machine of the electronic "still" camera system which adopted the still video image elimination method by this invention. The multi-picture-features function started automatically and this example is equipped with the function in which multi-screen selection actuation of a user also performs multi-picture features further, if equipped with a floppy disk. If the whole system is controlled and it is equipped with a floppy disk 3, in order that a system controller 1 may perform multi-picture features, it will start the spin DORUSA-Vo circuit 2 and will carry out drive control of the floppy disk 3. FG amplifier is connected to the spin DORUSA-Vo circuit 2, the output returns to a system controller 1, and rotation of constant speed is held.

[0007] The rotation location of a floppy disk 3 is detected by the PG coil 10, and the output of the PG coil 10 is amplified to suitable level with the PG amplifier 11, and it inputs it into a system controller 1. After a system controller 1 starts the timer which samples this PG signal and it has in the very thing and waits for it predetermined time, it sends out a write-permission signal to the memory controller 24. A system controller 1 sends out the control signal which should be made to seek in order from zero truck to 50 trucks to the head drive circuit 5. A head 4 reads FM modulation video signal from the sought truck.

[0008] After read FM modulation video signal is inputted into a head amplifier 8 through a switcher 6 and is amplified to proper level, it is separated into a luminance-signal Y part and a color signal C part by the Y/C separator 9. The Y demodulator 12 sends out a recovery signal to the SYNC separator 13, after restoring to the separated luminance-signal Y part. The SYNC separator 13 is Vertical Synchronizing signal VD from a recovery signal. Horizontal Synchronizing signal HD It dissociates and the separated luminance-signal Y+ synchronizing signal S (a horizontal and a perpendicular are included) is outputted to a video outlet side. Moreover, the C demodulator 14 is recovered from a color signal C part to the color-difference signal with which it was superimposed on R-Y and B-Y. The change signal generating circuit 15 is a circuit which creates the change signal for separating color-difference-signal R-Y and B-Y from a superposition color-difference signal, and carries out change control of the switcher 16 with the created change signal. Thereby, it separates into color-difference-signal R-Y and B-Y, and a superposition color-difference signal is outputted to a video outlet side.

[0009] The output of the SYNC separator 13 and a switcher 16 is connected to the switcher 17 and the switcher 23 of the multi-picture-features block 20, and switchers 17 and 23 are changed to the continuous-line side at the time of multi-screen write-in actuation. On the other hand, a system controller 1 sends out the address corresponding to the truck which the head is seeking while sending out a write-permission signal to the memory controller 24, as mentioned above. The memory controller 24 directs the address corresponding to the truck which the head is seeking to memory 22 in memory 22, and makes the address space memorize Y+S, such as a luminance signal, color-difference-signal R-Y, and B-Y by reception of a write-permission signal.

[0010] After writing is completed, a write-in terminate signal is returned to a system controller 1, and the video signal currently recorded on the next truck by the same actuation is memorized to the address of correspondence of memory 22. After memorizing repeatedly up to 50 trucks and completing the write-in actuation for multi-picture features, a system controller 1 directs read-out to the memory controller 24, and the multi-screen in memory 22 is read by it, and is outputted through a switcher 17. Y+S, such as a luminance signal of a multi-screen, is directly inputted into the NTSC driver 19 through the onscreen display controller 25, and after color-difference-signal R-Y and B-Y are changed into a chrominance signal by the C encoder 18, they are inputted, and they are changed into an NTSC signal. A multi-screen is displayed on the monitor which this does not illustrate. The onscreen display controller 25 is a circuit for superimposing a star mark in the location directed from the system controller of an image.

[0011] Drawing 2 is the circuit diagram showing the detail of the multi-screen block 20 of drawing 1. Hereafter, selection actuation of the image on a multi-screen which should be eliminated is explained, also referring to drawing 2. Suppose that 25 multi-screens were displayed by wearing of a floppy disk as mentioned above. In addition, when a user specifies the number of multi-screens and MARUCHIKI - (MLT KEY) chooses, a multi-screen can be displayed similarly. A truck to eliminate using cursor or a ten

key is chosen. And a mark key (MRK KEY) is operated. A system controller 1 sends out the address signal and star mark viewing command corresponding to the selected truck to the onscreen display controller 25.

[0012] A star mark is displayed on the image of the truck chosen by this. A star mark is displayed on the image of the truck which wants to eliminate plurality by repeating this actuation. Drawing 3 is drawing showing the multi-screen which displayed the star mark in the selected image, and the enlarged drawing of a selection image. Selection of an image to eliminate displays a star's selection mark on the upper left in an image. If other images are chosen next, a selection mark will be displayed on the upper left of the image chosen similarly. Thus, a star mark goes to the next into an image to eliminate from the next.

[0013] Termination of selection of the image of the truck which should be eliminated pushes IRE-skiing (ERS KEY). A system controller 1 transports a head 4 to the truck chosen by controlling the head drive circuit 5, changes a switcher 6 to the elimination circuit 7, and performs elimination actuation. This, the address corresponding to the truck eliminated to coincidence, and C and a Y+S chip select signal are sent to the memory controller 24. And it writes in the memory area which sent out the write-in change signal, changed to the bull-back SG21, and was vacant in the bull-back. After carrying out elimination actuation as mentioned above to one selected truck, a system controller 1 performs same elimination actuation to the truck chosen as the next, and makes the bull-back elimination of all the trucks chosen, and the image of the multi-screen corresponding to an elimination image.

[0014] The case where the monochrome display of the image to eliminate next is carried out is explained. It is the same as the case where a star mark is put in until it operates a mark key (MRK KEY) after choosing an image to eliminate. A system controller 1 sends out the address corresponding to the selected truck, and a chroma chip select signal to the memory controller 24. Address controller 22a receives the address from the memory controller 24, computes the memory area corresponding to this, and sends it out to memory. Then, if the memory controller 24 sends out a chroma chip select signal to memory, defined chroma memory 22b will be eliminated and it will become a monochrome display.

Drawing 4 is drawing showing the multi-screen which carried out the monochrome display of the selected image, and the enlarged drawing of a selection image. Thus, the monochrome display of all the selected images is carried out.

[0015] Termination of selection of the image of the truck which should be eliminated pushes IRE-skiing (ERS KEY). A system controller 1 transports a head 4 to the truck chosen by controlling the head drive circuit 5, changes a switcher 6 to the elimination circuit 7, and performs elimination actuation. This, the address corresponding to the truck eliminated to coincidence, and a Y+S chip select signal are sent to the memory controller 24. And if the memory controller 24 sends out a Y+S chip select signal to memory, defined Y+S memory 22c will be eliminated. And it writes in the memory area which sent out the write-in change signal, changed to the bull-back SG21, and was vacant in the bull-back. Thus, the image of elimination actuation and the multi-screen corresponding to an elimination image is made the bull-back to all the selected images.

[0016] As mentioned above, although the case where a star mark is put in, and the case where a monochrome display was carried out were explained as an approach of displaying the truck of the image which should be eliminated, it can be chosen by the key which the key unit 27 does not illustrate whether which the method of presentation is used. The image which should make the bull-back the image chosen as the other methods of presentation, and should eliminate it may be displayed. The address corresponding to the truck with which the system controller 1 was chosen in this case, the address corresponding to the truck chosen after sending out C (chroma) and a Y+S chip select signal to the memory controller 24, and a write-in change signal (bull-back) are sent out to the memory controller 24. Thereby, an image to eliminate serves as the bull-back. Other actuation is the same as the case where the above-mentioned star mark is put in. Since it is not necessary to divide a chip select signal into C and Y+S, when taking this approach, it can simplify a system control. In addition, when redoing image selection of the truck which should eliminate the image of the truck which should be eliminated a monochrome display or when indicating by the bull-back on the way, it is necessary to push and re-seek the reset key (RES KEY) which the key unit 27 does not illustrate. It is because the contents of memory 22 are changing.

[0017]

[Effect of the Invention] As mentioned above, since the display which this invention checks an image to

eliminate on a multi-screen in the electronic "still" camera system which has a multi-picture-features function as explained, and shows elimination is performed, it becomes possible to choose two or more images which should be eliminated collectively. And it becomes eliminable by one-touch control about the image chosen at random. Therefore, since the image which chose many images and was chosen by one-touch is eliminable according to this invention, checking the image which should be eliminated, there is effectiveness which can perform elimination actuation efficiently and certainly and to say.

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**TECHNICAL FIELD**

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[Industrial Application] If it says in more detail, when eliminating the image elimination method in an electronic "still" camera system with the display capabilities of multi-screens, such as 25 split screens, and the contents currently written in the floppy disk, in case this invention chooses a truck to eliminate using multi-picture features, it relates by displaying the image of the selected truck in distinction from other images to the still-video image elimination method it enabled it to eliminate, checking the contents of an image moreover continuously.

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**PRIOR ART**

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[Description of the Prior Art] The elimination actuation in the conventional electronic "still" camera system is started from one when the playback machine has stopped of conditions, while reproducing the image. What eliminates during playback of an image cannot choose two or more trucks of an image to eliminate at random. Moreover, although it is possible for what performs elimination to choose two or more trucks of an image to eliminate at once at random from halt, selection while checking an image cannot be performed.

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**EFFECT OF THE INVENTION**

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[Effect of the Invention] As mentioned above, since the display which this invention checks an image to eliminate on a multi-screen in the electronic "still" camera system which has a multi-picture-features function as explained, and shows elimination is performed, it becomes possible to choose two or more images which should be eliminated collectively. And it becomes eliminable by one-touch control about the image chosen at random. Therefore, since the image which chose many images and was chosen by one-touch is eliminable according to this invention, checking the image which should be eliminated, there is effectiveness which can perform elimination actuation efficiently and certainly and to say.

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**TECHNICAL PROBLEM**

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[Problem(s) to be Solved by the Invention] In addition, the image check was performed using the multi-screen as one of the approaches of eliminating the image of an electronic "still" camera system, and this artificer has already proposed the multi-screen elimination method which eliminates to coincidence the image of a floppy disk, and the image with which a multi-screen corresponds (Japanese Patent Application No. 5-87948). It is in offering the still video image elimination method which can eliminate all selection images by one-touch, after this invention's having developed the above-mentioned multi-screen elimination method more, and the purpose's performing the display which shows distinction with the image which chose two or more trucks to eliminate at once, checking the image, and did not choose them and choosing an image.

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**MEANS**

[Means for Solving the Problem] In order to attain said purpose, the still video image elimination method by this invention Multi-screen selection actuation starts automatically by floppy disk wearing. In the playback machine of the electronic "still" camera system which displays a multi-screen by reproducing the image of each truck of a floppy disk and writing in the memory for multi-screens by control of a memory controller The elimination circuit which eliminates the video signal currently recorded on said floppy disk, The display-output section for outputting the display which distinguishes visually the image which should eliminate said multi-screen, and other images on a multi-screen, When the image which should be eliminated on a multi-screen with the selection means and said selection means for choosing the image which should be eliminated is chosen, After displaying that it is distinguished from other images by said image which should be eliminated and choosing said image which should be eliminated one or more by said display-output section, it has the control means controlled to eliminate the image chosen by said elimination circuit from a floppy disk, and is constituted.

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**OPERATION**

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[Function] According to the above-mentioned configuration, selection becomes possible collectively, checking the contents of the truck of an image to eliminate. Moreover, it becomes eliminable by one-touch control about two or more images chosen at random.

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**EXAMPLE**

[Example] Hereafter, with reference to a drawing, this invention is explained in more detail. Drawing 1 is the circuit block diagram showing the example of the playback machine of the electronic "still" camera system which adopted the still video image elimination method by this invention. The multi-picture-features function started automatically and this example is equipped with the function in which multi-screen selection actuation of a user also performs multi-picture features further, if equipped with a floppy disk. If the whole system is controlled and it is equipped with a floppy disk 3, in order that a system controller 1 may perform multi-picture features, it will start the spin DORUSA-Vo circuit 2 and will carry out drive control of the floppy disk 3. FG amplifier is connected to the spin DORUSA-Vo circuit 2, the output returns to a system controller 1, and rotation of constant speed is held.

[0007] The rotation location of a floppy disk 3 is detected by the PG coil 10, and the output of the PG coil 10 is amplified to suitable level with the PG amplifier 11, and it inputs it into a system controller 1. After a system controller 1 starts the timer which samples this PG signal and it has in the very thing and waits for it predetermined time, it sends out a write-permission signal to the memory controller 24. A system controller 1 sends out the control signal which should be made to seek in order from zero truck to 50 trucks to the head drive circuit 5. A head 4 reads FM modulation video signal from the sought truck.

[0008] After read FM modulation video signal is inputted into a head amplifier 8 through a switcher 6 and is amplified to proper level, it is separated into a luminance-signal Y part and a color signal C part by the Y/C separator 9. The Y demodulator 12 sends out a recovery signal to the SYNC separator 13, after restoring to the separated luminance-signal Y part. The SYNC separator 13 is Vertical Synchronizing signal VD from a recovery signal. Horizontal Synchronizing signal HD It dissociates and the separated luminance-signal Y+ synchronizing signal S (a horizontal and a perpendicular are included) is outputted to a video outlet side. Moreover, the C demodulator 14 is recovered from a color signal C part to the color-difference signal with which it was superimposed on R-Y and B-Y. The change signal generating circuit 15 is a circuit which creates the change signal for separating color-difference-signal R-Y and B-Y from a superposition color-difference signal, and carries out change control of the switcher 16 with the created change signal. Thereby, it separates into color-difference-signal R-Y and B-Y, and a superposition color-difference signal is outputted to a video outlet side.

[0009] The output of the SYNC separator 13 and a switcher 16 is connected to the switcher 17 and the switcher 23 of the multi-picture-features block 20, and switchers 17 and 23 are changed to the continuous-line side at the time of multi-screen write-in actuation. On the other hand, a system controller 1 sends out the address corresponding to the truck which the head is seeking while sending out a write-permission signal to the memory controller 24, as mentioned above. The memory controller 24 directs the address corresponding to the truck which the head is seeking to memory 22 in memory 22, and makes the address space memorize Y+S, such as a luminance signal, color-difference-signal R-Y, and B-Y by reception of a write-permission signal.

[0010] After writing is completed, a write-in terminate signal is returned to a system controller 1, and the video signal currently recorded on the next truck by the same actuation is memorized to the address of correspondence of memory 22. After memorizing repeatedly up to 50 trucks and completing the write-in actuation for multi-picture features, a system controller 1 directs read-out to the memory controller 24, and the multi-screen in memory 22 is read by it, and is outputted through a switcher 17. Y+S, such

as a luminance signal of a multi-screen, is directly inputted into the NTSC driver 19 through the onscreen display controller 25, and after color-difference-signal R-Y and B-Y are changed into a chrominance signal by the C encoder 18, they are inputted, and they are changed into an NTSC signal. A multi-screen is displayed on the monitor which this does not illustrate. The onscreen display controller 25 is a circuit for superimposing a star mark in the location directed from the system controller of an image.

[0011] Drawing 2 is the circuit diagram showing the detail of the multi-screen block 20 of drawing 1. Hereafter, selection actuation of the image on a multi-screen which should be eliminated is explained, also referring to drawing 2. Suppose that 25 multi-screens were displayed by wearing of a floppy disk as mentioned above. In addition, when a user specifies the number of multi-screens and MARUCHIKI - (MLT KEY) chooses, a multi-screen can be displayed similarly. A truck to eliminate using cursor or a ten key is chosen. And a mark key (MRK KEY) is operated. A system controller 1 sends out the address signal and star mark viewing command corresponding to the selected truck to the onscreen display controller 25.

[0012] A star mark is displayed on the image of the truck chosen by this. A star mark is displayed on the image of the truck which wants to eliminate plurality by repeating this actuation. Drawing 3 is drawing showing the multi-screen which displayed the star mark in the selected image, and the enlarged drawing of a selection image. Selection of an image to eliminate displays a star's selection mark on the upper left in an image. If other images are chosen next, a selection mark will be displayed on the upper left of the image chosen similarly. Thus, a star mark goes to the next into an image to eliminate from the next.

[0013] Termination of selection of the image of the truck which should be eliminated pushes IRE-skiing (ERS KEY). A system controller 1 transports a head 4 to the truck chosen by controlling the head drive circuit 5, changes a switcher 6 to the elimination circuit 7, and performs elimination actuation. This, the address corresponding to the truck eliminated to coincidence, and C and a Y+S chip select signal are sent to the memory controller 24. And it writes in the memory area which sent out the write-in change signal, changed to the bull-back SG21, and was vacant in the bull-back. After carrying out elimination actuation as mentioned above to one selected truck, a system controller 1 performs same elimination actuation to the truck chosen as the next, and makes the bull-back elimination of all the trucks chosen, and the image of the multi-screen corresponding to an elimination image.

[0014] The case where the monochrome display of the image to eliminate next is carried out is explained. It is the same as the case where a star mark is put in until it operates a mark key (MRK KEY) after choosing an image to eliminate. A system controller 1 sends out the address corresponding to the selected truck, and a chroma chip select signal to the memory controller 24. Address controller 22a receives the address from the memory controller 24, computes the memory area corresponding to this, and sends it out to memory. Then, if the memory controller 24 sends out a chroma chip select signal to memory, defined chroma memory 22b will be eliminated and it will become a monochrome display.

Drawing 4 is drawing showing the multi-screen which carried out the monochrome display of the selected image, and the enlarged drawing of a selection image. Thus, the monochrome display of all the selected images is carried out.

[0015] Termination of selection of the image of the truck which should be eliminated pushes IRE-skiing (ERS KEY). A system controller 1 transports a head 4 to the truck chosen by controlling the head drive circuit 5, changes a switcher 6 to the elimination circuit 7, and performs elimination actuation. This, the address corresponding to the truck eliminated to coincidence, and a Y+S chip select signal are sent to the memory controller 24. And if the memory controller 24 sends out a Y+S chip select signal to memory, defined Y+S memory 22c will be eliminated. And it writes in the memory area which sent out the write-in change signal, changed to the bull-back SG21, and was vacant in the bull-back. Thus, the image of elimination actuation and the multi-screen corresponding to an elimination image is made the bull-back to all the selected images.

[0016] As mentioned above, although the case where a star mark is put in, and the case where a monochrome display was carried out were explained as an approach of displaying the truck of the image which should be eliminated, it can be chosen by the key which the key unit 27 does not illustrate whether which the method of presentation is used. The image which should make the bull-back the image chosen as the other methods of presentation, and should eliminate it may be displayed. The address corresponding to the truck with which the system controller 1 was chosen in this case, the

address corresponding to the truck chosen after sending out C (chroma) and a Y+S chip select signal to the memory controller 24, and a write-in change signal (bull-back) are sent out to the memory controller 24. Thereby, an image to eliminate serves as the bull-back. Other actuation is the same as the case where the above-mentioned star mark is put in. Since it is not necessary to divide a chip select signal into C and Y+S, when taking this approach, it can simplify a system control. In addition, when redoing image selection of the truck which should eliminate the image of the truck which should be eliminated a monochrome display or when indicating by the bull-back on the way, it is necessary to push and re-seek the reset key (RES KEY) which the key unit 27 does not illustrate. It is because the contents of memory 22 are changing.

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**DESCRIPTION OF DRAWINGS**

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**[Brief Description of the Drawings]**

**[Drawing 1]** It is the circuit block diagram showing the example of the still video image elimination method by this invention.

**[Drawing 2]** It is the circuit diagram showing the detail of a multi-screen block of drawing 1 .

**[Drawing 3]** It is drawing showing the example of the \*\* case which gives a mark to the selected elimination image.

**[Drawing 4]** \*\*\*\*\* which shows the example in the case of making the selected elimination image a MOROKURO display.

**[Description of Notations]**

- 1 -- System controller
- 2 -- Spin DORUSA-Vo circuit
- 3 -- Floppy disk
- 4 -- Head
- 5 -- Head drive circuit
- 6 -- Switcher
- 7 -- Elimination circuit
- 8 -- Head amplifier
- 9 -- Y/C separator
- 10 -- PG coil
- 11 -- PG amplifier
- 12 -- Y demodulator
- 13 -- SYNC separator
- 14 -- C demodulator
- 15 -- Change signal generating circuit
- 16 17 -- Switcher
- 18 -- C encoder
- 19 -- NTSC driver
- 20 -- Multi-screen block
- 21 -- Bull-back generating circuit
- 22 -- Memory
- 22a -- Address controller
- 22b -- Chroma memory
- 22 c--Y+S memory
- 23 -- Switcher
- 24 -- Memory controller
- 25 -- Onscreen display controller
- 27 -- Key unit

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[Translation done.]

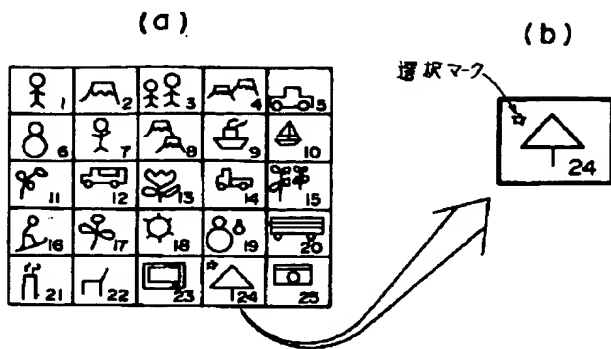
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- 1.This document has been translated by computer. So the translation may not reflect the original precisely.  
2.\*\*\*\* shows the word which can not be translated.  
3.In the drawings, any words are not translated.

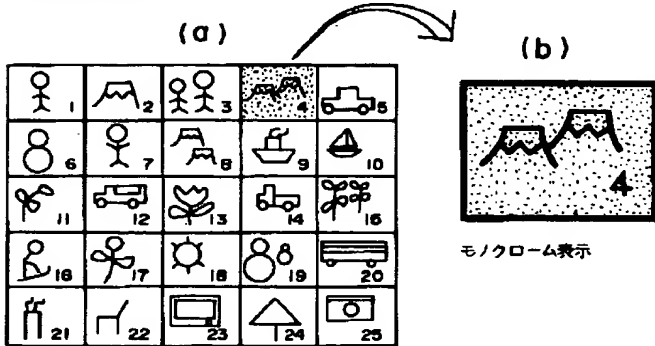
[Drawing 1]







[Drawing 4]



[Translation done.]